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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/717,102

11/19/2003

Phillip George Skeba

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34431

7590

05/14/2008

HANLEY, FLIGHT & ZIMMERMAN, LLC

150 S. WACKER DRIVE

SUITE 2100

CHICAGO, IL 60606

EXAMINER

TRAN, PHUC H

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

05/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/717,102	SKEBA ET AL.	
	Examiner	Art Unit	
	PHUC H. TRAN	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/28/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21,22,24,25 and 38-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21,22,24,25 and 38-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21-22, 24-25, 38, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mannering et al. (U.S. Patent No. 6137839) in view of Gitlin et al. (U.S. Patent No. 6064662).

- With respect to claims 21-22, 25, Mannering teaches a multiple channel system for a twisted pair telephone wire local loop system (e.g. Fig. 2e shows the wire local loop), comprising: a subscriber gateway system has a first transceiver connected to the twisted pair telephone wire, the first transceiver sending and receiving multiple independent channels (e.g. block 210 in Fig. 2a and Fig. 1 block 195);

an second transceiver at a central office connected to the twisted pair telephone wire, the second transceiver sending and receiving multiple independent channels (block 220 2a); and

a plurality of digital filters, operatively coupled to the first and second transceivers (e.g. filter 174 and 176 in Fig. 1b). Mannering fails to teach to convey a signal via an available frequency band associated with the multiple independent channels. Gitlin teaches the signal into an available frequency band (see fig. 6 of Gitlin and col. 4, lines 43-45) for transmitting signal. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the method of

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signals into the available frequency band in order to transmit in channels; further comprising a digital subscriber line access multiplexer coupled to an output of the second transceiver (e.g. xDSL in Fig. 2b).

- With respect to claim 24, Mannering teaches wherein each of the plurality of digital filters has an output, and wherein each of the outputs is to be summed by a summer (see col. 20, lines 35-37).

- With respect to claim 38, Mannering teaches wherein the first transceiver in the subscriber gateway is to transmit a plurality of frequency division multiplexed signals (col. 4, line 42).

- With respect to claim 39, Mannering discloses wherein the first transceiver in the subscriber gateway is to transmit a plurality of time division multiplexed signals (e.g. col. 9, line 48).

- With respect to claim 41, Mannering teaches further comprising a local circuit switch coupled to an output of the second transceiver (e.g. the switching matrix in Fig. 2a).

3. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mannering et al. (U.S. Patent No. 6137839) in view of Gorman (U.S. Patent No. 6141356).

- Mannering fails to teach transmits a plurality of CDM signal. Gorman teach the CDMA (col. 7, line 7) for providing greater bandwidth capacity, less interference and protection. Therefore, it would have been obvious to a person of ordinary skill in the art

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at the time of the invention was made to utilize the CDMA into Mannering's system for protecting signal, less interference and greater bandwidth capacity.

Response to Amendment

4. Applicant's arguments with respect to claims 21-22, 24-25, 38- 41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571)272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PHUC H TRAN/
Examiner, Art Unit 2616

/Chi H Pham/
Supervisory Patent Examiner, Art Unit
2616
5/12/08